

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1a. This sheet, which includes Figs. 1a and 1b, replaces the original sheet including Figs. 1a and 1b.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the present amendment and in light of the following discussion, is respectfully requested.

Claims 12-14, 17-20, and 22-24 are pending. In the present amendment, Claims 12 and 18-20 are currently amended, Claims 15, 16, and 21 are canceled without prejudice or disclaimer, and new Claims 23 and 24 are added. Support for the present amendment can be found in the original specification, for example, at page 9, line 33 to page 10, line 3, at page 11, lines 6-33, in original Claims 1, 5, and 10, and in original Figures 1a and 1b. Thus, it is respectfully submitted that no new matter is added.

In the outstanding Office Action, the drawings were objected to; Claims 12-22 were rejected under 35 U.S.C. § 112, second paragraph; Claims 12, 16, and 19-21 were rejected under 35 U.S.C. § 102(b) as anticipated by Schiminski et al. (U.S. Patent No. 4,431,138, hereinafter “Schiminski”); Claims 13 and 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Schiminski in view of Westrich (U.S. Patent No. 6,105,896); Claims 14, 18, and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Schiminski in view of Sakurauchi et al. (Japanese Patent Publication No. 06-329437, hereinafter “Sakurauchi”); and Claim 15 was rejected under 35 U.S.C. § 103(a) as unpatentable over Schiminski in view of Cunningham et al. (U.S. Patent No. 3,090,570, hereinafter “Cunningham”).

Initially, Applicants would like to thank Supervisory Patent Examiner Cuomo and Examiner Dondero for the courtesies extended to Applicants’ representative during the interview on February 5, 2008. During the interview, the outstanding Office Action was discussed in view of proposed claim amendments. Based on the discussion, the present amendment is hereby submitted.

In response to the outstanding objection to the drawings, it is noted that amended Claim 12 no longer recites “kinematic chain” or “motor.” Additionally, it is noted that

Claims 15 and 16 are canceled without prejudice or disclaimer. Therefore, it is respectfully submitted that the outstanding objection to the drawings is moot. Thus, it is respectfully requested that the outstanding objection to the drawings be withdrawn.

Figure 1a is hereby amended to show the “linear actuator” recited in amended Claim 12. Additionally, the specification is hereby amended to reflect that the linear actuator shown in Figure 1a is designated by reference numeral 12. Support for the linear actuator can be found in the original specification, for example, at page 9, line 33 to page 10, line 3. Thus, it is respectfully submitted that no new matter is added.

Regarding the outstanding rejection of Claims 12-22 under 35 U.S.C. § 112, second paragraph, it is noted that the term “a kinematic chain” is no longer recited in Claim 12. In view of the amendments to Claim 12, it is believed that all pending claims are definite and no further rejection on that basis is anticipated. However, if the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

Turning now to the outstanding rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a), Applicants respectfully request reconsideration of these rejections and traverse these rejections, as discussed below.

Amended Claim 12 recites:

A winding machine, comprising:

a frame, comprising

at least two spindles fastened to a barrel, each of the spindles being configured to support at least one cake and to be movable in rotation about a first axis substantially perpendicular to a diameter of the cake,

at least one positioning and guidance device configured to position and guide at least one thread on the spindles, and

a linear actuator configured to continuously drive the spindles linearly in forward and reverse directions along the first axis during winding of the at least one thread,

wherein the barrel is mounted movably in rotation with respect to the frame along a third axis of rotation substantially parallel to the first axis.

In the winding machine described in Claim 12, a linear actuator is provided to drive the spindles linearly in *forward and reverse directions* along the first axis. Additionally, the linear actuator can drive the spindles continuously with or without the movement of the positioning guidance device. As explained in the original specification, for example, at page 11, lines 6-33, such a linear actuator can be combined with the positioning and guidance device to provide both primary stroke movement and secondary stroke movement. Accordingly, it is possible to obtain a wide range of laws of construction of the cake and of crossing ratios of the cake. Additionally, it is possible to obtain particular geometries by combining the uncoupled or coupled movements of the primary and secondary strokes with a controlled movement in an angular position and/or in the speed of the barrel supporting the spindles. It is respectfully submitted that the cited references do not disclose or suggest every feature recited in amended Claim 12.

Schiminski describes a yarn winding apparatus including a bobbin 7 placed on a first winding chuck 9.1 which is rotationally driven.¹ Schiminski also describes a second bobbin 7 positioned on a second winding chuck 9.2.² Further, Schiminski describes that each of the winding chucks 9.1, 9.2 is equipped with an engageable and disengageable auxiliary drive which is illustrated schematically in Figure 4. Further, Schiminski describes that when the yarn is switched from the bobbin 7 on the first winding chuck 9.1 to the bobbin 7 on the second winding chuck 9.2, the first winding chuck 9.1 is axially displaced in one direction so

¹ See Schiminski, at column 3, lines 33-35 and in Figure 1a.

² See Schiminski, at column 3, lines 35-37 and in Figure 1a.

that the yarn can wind over the full package of the bobbin 7 on the first winding chuck 9.1 before being transferred to the bobbin 7 on the second winding chuck 9.2.³

However, it is respectfully submitted that Schiminski does not disclose or suggest “a linear actuator configured to continuously drive the spindles linearly in forward and reverse directions along the first axis during winding of the at least one thread,” as recited in Claim 12.

Instead, Schiminski describes that the winding chuck is only driven in one axial direction represented by reference numeral 15 in Figure 2 shortly before or after the winding is complete.⁴ Additionally, Schiminski describes that after the first winding chuck 9.1 axially shifts in the direction indicated by reference numeral 15 in Figure 2, the yarn guide lifts the yarn and guides it to the second winding chuck 9.2. Therefore, there would be no reason to shift a first winding chuck 9.1 in a second direction opposite to that represented by reference numeral 15 since the yarn is no longer being wound around the bobbin 7 positioned on the first winding chuck 9.1. Thus, the winding chucks 9.1, 9.2 are not continuously driven linearly in forward and reverse directions during winding of the yarn.

Therefore, it is respectfully submitted that Schiminski does not disclose or suggest every feature recited in amended Claim 12. Thus, it is respectfully requested that the outstanding rejection of Claim 12, and all claims dependent thereon, as anticipated by Schiminski be withdrawn.

Turning now to the remaining rejections in the outstanding Office Action, Applicants respectfully submit that none of the remaining secondary references (Westrich, Sakurauchi, and Cunningham) cure the deficiencies noted above with respect to Schiminski. Therefore, for at least the reasons discussed above, it is respectfully submitted that independent Claim

³ See Schiminski, at column 4, line 49 to column 5, line 23 and in Figures 2 and 3.

⁴ See Schiminski, at column 4, line 68 to column 5, line 4.

12, and all claims dependent thereon, patentably define over all of the cited references. Thus, it is respectfully requested that the outstanding rejections of Claims 12-14, 17-20, and 22 be withdrawn.

New Claims 23 and 24 are added by the present amendment. Support for new Claims 23 and 24 can be found in the original specification, for example, at page 9, line 33 to page 10, line 3, in original Claims 1, 5, and 10, and in original Figures 1a and 1b. Thus, it is respectfully submitted that no new matter is added.

Claim 23 recites, *inter alia*, a method for winding cakes, including “driving continuously the first spindle linearly in forward and reverse directions along the first axis while the first spindle is in the thread receiving position; and after the first driving the spindle linearly in the forward and reverse directions, rotating the barrel so that the second spindle is in the thread receiving position.”

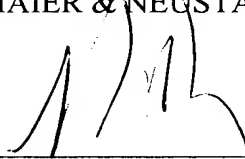
As discussed above, it is respectfully submitted that neither Schiminski, nor any of the remaining secondary references, describe driving the spindle linearly in both forward and reverse directions along the first axis. Additionally, it is noted that Schiminski only describes that the first winding chuck 9.1 is moved axially in one direction indicated by reference numeral 15 *after* the first winding chuck 9.1 has been shifted from a distance L1 from the traversing yarn guide 3 to a distance L2 from the traversing yarn guide 3. Therefore, Schiminski does not continuously drive the winding chucks 9.1, 9.2 linearly in forward and reverse directions. Thus, it is also respectfully submitted that neither Schiminski, nor any of the other cited references, describe that the spindle is driven linearly in the forward and reverse directions *before* a barrel on which the spindle is attached is rotated.

Therefore, it is respectfully submitted that new Claim 23, and Claim 24 which is dependent thereon, patentably define over the cited references.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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